

## COURSE OF GULF STREAM SHIFTING

Scientists in France Are Alarmed Over Effects on Their Climate

From the Brooklyn Eagle.

The filling in of the water spaces between the Florida keys through Florida bay by the Florida East Coast railroad has so alarmed French scientists that Professor Berget, director of the institute of oceanography, has predicted that as a result the gulf stream may be diverted, leaving Europe to face winters of 40 degrees below zero and summers too bleak and cold to raise crops.

Capt. Frederick B. Bennett, Jr., chief of the navy hydrographic office, has sent for Professor Berget's data, explaining at the same time that the office has no information on the possible effect of the railroad on the gulf stream. It was pointed out that Florida bay is naturally shallow, and that the gulf stream is formed by a junction of the south equatorial current, sweeping past Central America and across the Gulf of Mexico through the Florida straits, and the north equatorial current, passing outside the West Indies archipelago, up past the Bahamas. Six knots is given as the current at the straits. Local authorities say that apparently the fill would have little effect, although investigation might reveal some startling results.

Theory Not Seriously Accepted.

One of the theories advanced concerning the damp weather records being up during the past summer was that the gulf stream had shifted. This theory is not treated seriously, as it is not treated as a scientific fact. The fill between the keys is regarded as one of the engineering triumphs of the present generation. There is one large arch viaduct through which the current pours with great swiftness. The hydrographic office has warned mariners to give this point, just west of the treacherous Tennessee reef, a wide berth. The rest of the fill is closed. The navy officials make no attempt to scout Professor Berget's theories.

The currents are so complex," said Captain Bennett, "that any interference might have an effect. The gulf stream originates beyond the Florida straits, but there are factors there which help it along."

He pointed out that reports from ships do not indicate any shift of current.

Many Changes Proposed.

Many schemes have been proposed to change the gulf stream do more work than it now does to give its shores a mild, almost tropical climate. One of the most ambitious and from an engineering standpoint, probably least workable, was to build an enormous breakwater across the Grand Banks of Newfoundland, in holding back the Labrador current, which comes down from the frozen north to raise rain with the weather as it hits its mild brother current, the gulf stream. More selfish projects have also been proposed, such as building a breakwater to hold the gulf stream back on the New England shore.



CHARLES I. O'NEILL

There has been no more consistent and persistent booster and promoter of the Oklahoma district than Charles I. O'Neill, secretary of the Oklahoma District Oil and Gas association, who has been writing oil news and compiling statistics and information of the Oklahoma district ever since he landed in Oklahoma in January, 1917. Mr. O'Neill was trained in the newspaper game and had a wide experience in every sort of newspaper work before he came to Oklahoma. He compiled the first authentic production figures of the district in 1920 and has kept these figures up-to-date and he has assembled and filed a large amount of information of all sorts about the district, which has proven of great benefit to operators and producers.

As a writer on all subjects relating to the Oklahoma district Mr. O'Neill is recognized by all of the magazines and newspapers publishing oil news and his stories of the development of the five counties make up the Oklahoma district have been read wherever oil news is read. Several of the big deals in oil properties which have been made in the Oklahoma district in the past five years were initiated by reports and stories prepared by Mr. O'Neill. He is still engaged in securing information about the field and spreading it broadcast and a part of his present duties is to send a story of the field to outside publications every day. Known for his accuracy and for his avoidance of the ordinary "booster" type of story, articles written by Mr. O'Neill are generally accepted and printed without question and the material supplied by him is sought after by oil publications.

Mr. O'Neill was born near Rochester, N. Y., and was educated at Canandaigua academy at Canandaigua, Canandaigua, Rochester and Gloucester, Mass. In various capacities he worked on newspapers in Canandaigua, Rochester and Gloucester, N. Y., and in Boston and Worcester, Mass. During the years 1911 and 1912 he made a 17,000-mile tour throughout the northwest and far west as an advertising representative of the National Press association. He came to Oklahoma in January, 1917, as city editor of the Oklahoma Democrat and was made

## World's Daily Bread; Its Appearance in Many Lands

By A. M. BARNES.  
(Written Special for the Semi-Weekly Farm News.)

The department of agriculture has given out figures which show a marked decrease in the world's wheat output for the present year, as compared with that of 1921. In the department's compilation for the last year the world's production of wheat was given as 2,049,074,000 bushels; for the present year it is estimated at 1,912,387,000. This, however, does not include the yields from Russia and Mexico, the figures of which have been difficult to get with any accuracy, owing chiefly to political conditions.

A report issued by Alfred P. Dennis, head of the department of commerce, Paris, France, gives some interesting figures with reference to the world's decrease in the output of wheat for the present year. This report places the total yield of Europe at \$55,850,000 bushels, as against 1,215,084,000 bushels for the year 1921. Mr. Dennis' estimates for the present year, places France's production at 215,130,000 bushels, compared with that of 325,467,000 bushels for 1921, and Germany's output at 69,670,000 as against 107,457,000 bushels produced in 1921.

American Yield Larzer.

Despite this decrease in the production of wheat in other parts of the world, it is gratifying to us of the United States to learn through the estimates issued by our department of agriculture that the output of wheat for the present year shows a marked increase, from 724,833,000 bushels for 1921, to 810,123,000 for the present year. Thus, surely, there will be no scarcities in our bread supply for the present; either are there any indications that the prices of breadstuffs will soar, as many have feared. Canada is the one other country to show an increase in the wheat supply. In 1921 Canada produced 30,043,000 bushels. The estimates for the present year give the output as 388,773,000 bushels.

It is interesting to note the sources whence the different countries of the world draw their bread supplies. Each has a bread peculiarly its own. Some countries use corn almost entirely, while wheat is the main dependence of others. Others again use oats or rye, while still others, notably Korea, compound a coarse bread of ground millet seed, though Korea raises both wheat and oats to some extent and considerable rice. The Icelandic bread is of

oil editor in March 1918. On December 1, 1919, he was made publicity director of the Oklahoma chamber of commerce and served in that capacity until October 1, 1921 when he was elected secretary of the Oklahoma Oil and Gas association. He has had a substantial part in building up the association to the place which it holds today as the most active and representative independent oil men's association in the country. Mr. O'Neill is married and resides at 1400 East Tenth street, Oklahoma. His office is at 211 South Morton avenue where any member of the oil fraternity from any part of the world always receives a warm welcome.

reindeer moss, dried, pulverized and kneaded. On the bleak shores of Labrador there grows a beach grass which bears an edible seed. The seed is dried, pounded and made into bread.

Importance of Bread.

Bread is well named "the staff of life." We could do without a y other article of food better than we could without bread. Though the people of China, Japan, Korea, India and other eastern lands have shown very clearly how satisfactory rice is as the chief source of their daily food.

We of the countries, where bread is baked "light," where yeast cakes are common and crisp baker's loaves are to be had daily, are favorites of fortune. In olden times, the present yeast cake was unknown. The custom then was for the housewife to save a bit of the dough to sour from one baking to another. The women of those days used often to go miles to other households to borrow a bit of sour dough for the next day's baking.

What a blessing it is to have new rice, white flour, finely ground from wheat, for our loaves and rolls. Before the days of flour mills the best of the people who lived then could do was crush wheat between two flat stones. During recent excavations at Pompeii, some bread was found that had been made of wheat with the grains but little more than broken in half. In the olden times bread was quickly kneaded and pressed between the hands of the baker and the Saxonate. The dough was kneaded in a stone or wooden trough and as often as not the cakes were baked in the ashes. In those days people were very superstitious and there was much a housewife who did not make her cakes with a cross or placing them in ashes or on stone to bake. This precaution was taken to guard against "any evil in the fire."

Belgians Great Bread Eaters.

Belgium was in the days of prosperity ranked first as the greatest bread-eating country in the world in proportion to population. The Belgian farmers, owing to the scanty extent of their acres, had to import a large amount of the wheat that was used. It required fully 60,000,000 bushels of wheat annually, in addition to the amount raised by native farmers, to supply the people of Belgium with bread. This heavy importation of wheat and of other grains caused Antwerp, Belgium, to rank as the third port in the world. England is still partial to the "scone," a form of bread centuries old. It is a round loaf of wheat flour resembling a big biscuit. The French are renowned bread eaters, and the French bakers are said to turn out the finest of palatable loaves.

Before the World war, Germany raised quantities of wheat, as well as rye, more than enough for home consumption, so that annually thousands of bushels were shipped to other markets. Despite the quantity of wheat raised in Germany, rye bread seems to be the favorite. Much of Germany's daily bread supply is baked in public ovens, as was the custom before the World war. The thrifty German housewives mix and knead their loaves at home, but carry

them to the town oven to be baked.

Certain days are set apart for the baking of the private loaves, while other days are given over to the baking of bread to be sold to the public.

Scotland is renowned for her "oat cakes" and "scotch scones." The "oat cakes" are made of roughly-crushed oat meal, moistened with salted water. After the dough is kneaded, it is laid on a board and rolled out thin. Then it is cut into the sizes desired and baked on a sheet of iron or in an oven. The "scotch scone" is made in much the same way, though of wheat flour instead of oatmeal.

Bread in Russia.

The Russian peasant is partial to sour black bread, while the better class uses what is known as "choude bread." The loaves are so called because they have a crescent-shaped opening near the center through which the hand can be placed, and because that portion of the loaf about which the hand is clasped looks like the handle of a basket. These loaves have a heavy crust, and are made of what in the United States is known as macaroni flour.

Russia has never taken front rank as a wheat-raising country, chiefly because of the lack of scientific methods among the peasant farming class; because, too, rye had always been the favorite grain with them. Even before the World war and the coming of the present disastrous conditions of the agricultural industry, the Russian farmer was known for his careless apathetic ways of tilling the soil. The average wheat yield before the war ran only to about eight bushels to the acre. Yet Russia has a great area of black, fertile soil, estimated at upward of 225,000,000 acres. Estimates for the

wheat crop for the present year in Russia give the yield as far below that needed for home consumption.

The bread of Finland is tough and hard, devoid of "shortening," and looks like a ship's biscuit. The dough from which the Norwegian peasant's bread is made is usually of barley meal and water, as often as not without even a pinch of salt. In Norway much of the bread-making is done out of doors, under rude shelters. The barley dough is rolled thin and baked on hot stones. A large portion of the bread in Sweden is made of rye flour. Bread-making is not a daily event in the household there. It is done periodically, generally twice a month. Large quantities have thus to be baked at one time.

Denmark, like Sweden, makes its bread chiefly of rye flour. The bread of the Scandinavian countries is usually baked disc-shaped, with a hole through the center, so that the loaves can be strung on a pole placed horizontally in one corner of the storehouse.

Few Bakeries in Mexico.

Most of the bread of Mexico is baked at home. There are few public bakeries, only one here and there in the larger cities. The baking of bread in Mexico is truly a primitive affair. Much of it is done out of doors. Corn is the grain used for Mexico's daily bread supply. The kernels are first soaked in lime water. When soft, they are rolled between two stones, the crust is to a pulp. The mass is then kneaded into dough and pressed between the palms of the hands into flat cakes known as "tortillas." The baking is done either on a griddle or on hot stones. In a short while the tortilla becomes hard and curls up. In this shape it is used as a

spoon by the Mexicans to dip up his soup, or stew of goat's meat. Even in the large cities of Mexico, where there are public bakeries, a baker's wagon is a rare sight. The people flock to the bakeries for their daily supply, or it is sent out to them in immense baskets, borne on the heads of porters.

Rich and poor in Mexico eat tortillas, though in the homes of the former the cooking is done in a brick or clay oven, built in the wall of the kitchen.

Cuba has bread of many shapes, from the artistically-twisted French loaf to the long, cylindrical loaf 18 to 18 inches in length. When this loaf is cut, the slices are no larger around than our silver dollar. Other Cuban loaves resemble loaves easy to hop, and distorted terrapins, with their heads twisted over their backs. As a general thing, however, the Cuban bread is well baked and wholesome.

What Chinese Eat.

While rice is the chief food of the Chinese, as well as of the Japanese,

a good bit of bread is consumed in both countries, and rice flour is one of the chief ingredients of the bread-making. In China, the most popular kind is boiled bread, and has been for centuries; yet in most of the cities of China and in many of the towns the public bakery is found, where loaves, neatly shaped and baked are turned out daily.

We of the United States eat bread made of a variety of grains, wheat, corn, rye, and even oats and barley; for our country is rich in the production of each of these grains. Our favorite bread, depends upon the season in which we live. Taken all in all, we certainly are big bread eaters. Someone who likes to judge with figures has given out as a result of his "figuring," the statement that of the bread eaten by the people of the United States annually could build a wall around the entire American continent. This wizard of figures saved his reputation by failing to state the height and width of the wall.

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## An Editorial From

# The OIL and GAS JOURNAL

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## The Dawn of a New Year

With the old year drawing to a close The Oil and Gas Journal desires to express its hearty thanks to its readers and advertisers for their continued confidence in the "Oil Man's Bible."

This publication has expanded greatly in the past 12 months, in size, in the scope of its news service, and in advertising business and circulation, and while we are very proud of all this, the point that impresses us most deeply is that we have not only retained the friends we have long had, but have made many new ones whom we hope to keep.

The old policy laid down by the founder of The Oil and Gas Journal, the late P. C. Boyle, is the present day policy, and that is to best serve the industry wherever and whenever possible; to print all the news that is worth printing concerning oil and gas and to publish those exclusive statistics that will make it possible for its readers to keep abreast of conditions.

In the past year, several features were added to The Oil and Gas Journal, including a complete refining and marketing department, a Washington bureau, and a New York bureau, all of which are in charge of competent men. Our regular field staff is made up of the same reliable men we had a year ago, with the exception that in California the death of Charles H. Gilman made a change necessary.

The Oil and Gas Journal greets the year 1923 with optimism. It will be our aim to improve the publication wherever possible, in the coming year, and we will strive, as in the past, to give our readers a news and a statistical service they cannot get elsewhere, and one on which they can always place dependence.

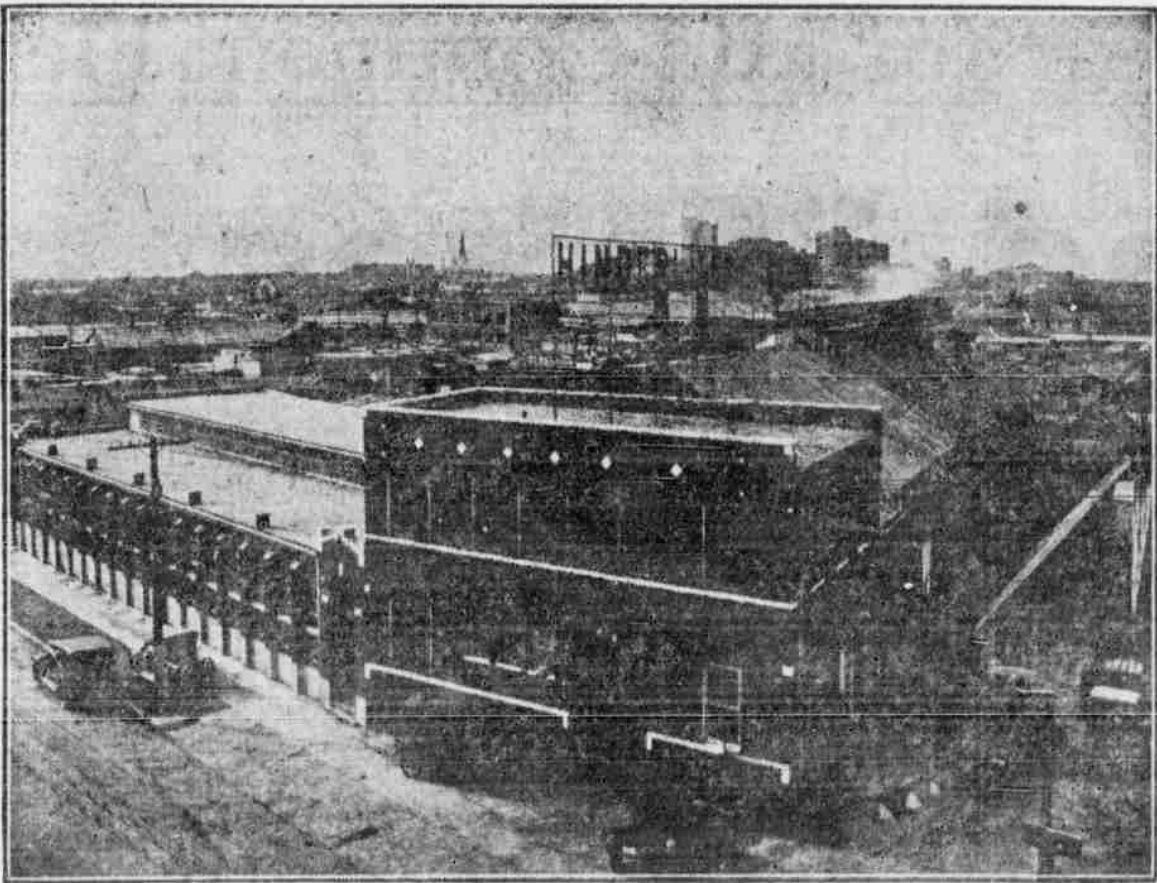
The industry may feel assured at all times that in The Oil and Gas Journal it has a champion that will fight for the welfare of the oil business and against those dangerous outside influences that are constantly seeking to misrepresent it, and to exploit themselves.

The industry is growing bigger and stronger. Producer, refiner and marketer are getting closer to each other, and there is a better understanding between them than ever before. New

blood and new brains are being added to the business. Scientific men and technical experts are becoming more and more interested in it and its problems. The engine builder and the fuel manufacturer are working out their problems in the same laboratory, which is a good thing for the ultimate consumer. There has never been so much progress along these lines as in the past year, but there will be more of it in the year to come. Next year should bring out some remarkable results from this co-operative research, just as it should show great progress in the standardization of oil field equipment and drilling tools.

The general feeling is that the coming year will be a prosperous one for each branch of the industry. The impression is that there will be a lessening of production and an increase in consumption and that before 1923 has ended, America will be "crying for oil." This may turn out to be true.

We sincerely hope that conditions will shape themselves so that the producer will get more for his crude and that the refiner and the marketer will correspondingly profit. A high market price for crude will mean an increase in wildcatting, which in turn will mean more business for the supply trade. All engaged in the oil business would benefit. But the history of the business is that no man or set of men can truthfully forecast the oil business, because no one has yet come forward who has been able to say what Mother Earth has in stored petroleum, and every wildcat well drilling in the United States has a chance to open a new pool. Since the days of Cushing, there have been many big fields opened and developed in California, Wyoming, Kansas, Oklahoma, Texas, Louisiana, Arkansas and Mexico, and smaller ones in Montana, Pennsylvania and other states which have combined to produce a quantity of crude few people thought existed. The possibilities of the United States as a producer of oil are not yet known, so it is rash to make any predictions for 1923, but on the present day face of things the future is viewed with optimism.



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